

NC/QC/YD/2020-21/P2-C1

Date: 21-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company)

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE I.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	156 min	Shall not be less than 30 min
2	Final setting time	265 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.11%	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	2.09mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.64 N/Sq mm	Shall not be less than 27 N/Sqmm

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NC/QC/YD/2020-21/P2-PCCI

Date: 21-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007)	
		% Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 - 100
20mm	64.75	0 -20	30- 70
10mm	30.20	0 -5	10- 35
4.75mm	4.05	---	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

7. FINE AGGREGATES TABLE - SIEVE ANALYSIS					
IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002)			Remarks
		Percentage Passing			
		Zone-I	Zone-II	Zone -III	
04.75	97.35	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	82.05	60-95	75-100	85-100	
01.18	74.80	30-70	55-90	75-100	
600.mic	47.15	15-34	35-59	60-79	
300.mic	22.55	5-20	8-30	12-40	
150.mic	6.20	0-10	0-10	0-10	

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NEWZEN CONSULTANTS BANGALORE



NC/QC/YD/2020-21/P2-C2

Date: 22-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987)

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thrumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) }

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	162 min	Shall not be less than 30 min
2	Final setting time	280 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.15%	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	2.04 mm	Shall not be more than 10 mm
5	Compressive strength b) 3 days (average of three results)	28.76 N/Sq mm	Shall not be less than 27 N/Sqmm

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ಸಹಾಯಕ ಪ್ರಾಧಿಕಾರಿ
ಯು.ಪಿ.ಎ. ಸುಪರ್ಟೆಂಡಿಂಗ್
ಇಂಜಿನಿಯರ್, ಬಿ.ಬಿ.ಎ.ಪಿ.ಸಿ.





NC/QC/YD/2020-21/P2-PCC2

Date: 22-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
		Single size	Graded
40mm	100.00	85-100	90 - 100
20mm	62.35	0 -20	30- 70
10mm	29.10	0 -5	10- 35
4.75mm	3.90	-----	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone-III	
04.75	94.70	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	83.25	60-95	75-100	85-100	
01.18	71.50	30-70	55-90	75-100	
600.mic	47.30	15-34	35-59	60-79	
300.mic	23.10	5-20	8-30	12-40	
150.mic	6.80	0-10	0-10	0-10	

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ಯು.ಎಸ್.ಎಸ್. ಕಾರ್ಪೊರೇಷನ್-106
ಆರ್.ಎಂ.ಎ. ಬೆಂಗಳೂರು-106





NC/QC/YD/2020-21/P2-C3

Date: 24-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

PHYSICAL TESTS ON CEMENTGrade * : 53,
Type * : O.P.C**TABLE 1.1:**

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	154 min	Shall not be less than 30 min
2	Final setting time	275 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.12 %	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	2.07 mm	Shall not be more than 10 mm
5	Compressive strength c) 3 days (average of three results)	28.94 N/Sq mm	Shall not be less than 27 N/Sqmm

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ಯೋಜನೆ ಸಹಾಯಕ ಅಧ್ಯಯನ
ಪಿ.ಪಿ.ಎಂ.ಓ. ಬೆಂಗಳೂರು-108





NC/QC/YD/2020-21/P2-PCC3

Date: 24-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) ;

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
		Single size	Graded
40mm	100.00	85-100	90 - 100
20mm	67.45	0 - 20	30- 70
10mm	28.15	0 - 5	10- 35
4.75mm	3.75	0 - 5	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	98.35	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	82.10	60-95	75-100	85-100	
01.18	70.80	30-70	55-90	75-100	
600 mic	45.65	15-34	35-59	60-79	
300 mic	22.10	5-20	8-30	12-40	
150 mic	6.25	0-10	0-10	0-10	

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 ಸಹಾಯಕ ಮುಖ್ಯಮಂತ್ರಿ ಕಾರ್ಯಾಲಯ,
 ಯು.ಎ.ಸಿ. ಕಟ್ಟಡ, ಬೆಂಗಳೂರು-106
 ಸಿ.ಪಿ.ಎಂ.ಸಿ. ಕಛೇರಿ-106





NC/QC/YD/2020-21/P2-C4

Date: 25-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

PHYSICAL TESTS ON CEMENTGrade * : 53,
Type * : O.P.C**TABLE 1.1:**

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	158 min	Shall not be less than 30 min
2	Final setting time	265min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.11 %	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	2.08 mm	Shall not be more than 10 mm
5	Compressive strength d) 3 days (average of three results)	28.56 N/Sq mm	Shall not be less than 27 N/Sqmm

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NC/QC/YD/2020-21/P2-PCC4

Date: 25-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

1. COARSE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
		Single size	Graded
40mm	100.00	85-100	90 - 100
20mm	63.10	0 -20	30- 70
10mm	31.80	0 -5	10- 35
4.75mm	4.05	-----	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.25	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	83.15	60-95	75-100	85-100	
01.18	71.65	30-70	55-90	75-100	
600 mic	47.30	15-34	35-59	60-79	
300 mic	23.15	5-20	8-30	12-40	
150 mic	7.45	0-10	0-10	0-10	

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NC/QC/YD/2020-21/P2-C5

Date: 28-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02))

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

PHYSICAL TESTS ON CEMENTGrade * : 53,
Type * : O.P.C**TABLE 1.1:**

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	162 min	Shall not be less than 30 min
2	Final setting time	285 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.13 %	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	2.06 mm	Shall not be more than 10 mm
5	Compressive strength e) 3 days (average of three results)	28.44 N/Sq mm	Shall not be less than 27 N/Sqmm

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NC/QC/YD/2020-21/P2-PCC3

Date: 28-09-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapur and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref.: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

1. COARSE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
		Single size	Graded
40mm	100.00	85-100	90-100
20mm	66.55	0-20	30-70
10mm	30.25	0-5	10-35
4.75mm	4.15	---	0-5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.40	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	80.25	60-95	75-100	85-100	
01.18	73.55	30-70	55-90	75-100	
600.mic	48.35	15-34	35-59	60-79	
300.mic	22.80	5-20	8-30	12-40	
150.mic	6.05	0-10	0-10	0-10	

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NC/QC/YD/2020-21/P2-CE1

Date: 24-09-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	154 min	Shall not be less than 30 min
2	Final setting time	270 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	1.86 %	Not to exceed 10.0%
4	Soundness test (by Le-Chatelier's method)	1.92 mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.54 N/Sq mm	Shall not be less than 27 N/Sqmm

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ನಿರ್ದೇಶನಾಧೀನ ಕೆಲಸದ ವಿವರಣೆ
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03.09.2020 ರಂತೆ





NC/QC/YD/2020-21/P2-FA2

Date: 24-09-2020

1. TESTING OF FINE AGGREGATES:

Sub: Testing of Fine Aggregates

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TABLE - 1.1: SIEVE ANALYSIS

TABLE - 11: SIEVE ANALYSIS					
IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002)			Remarks
		Percentage Passing			
		Zone-I	Zone-II	Zone -II	
04.75	96.15	90-100	90-100	90-100	The Sample Conforms to Grading Zone-II
02.36	80.25	60-95	75-100	85-100	
01.18	71.05	30-70	55-90	75-100	
600 mic	46.80	15-34	35-59	60-79	
300.mic	24.50	5-20	8-30	12-40	
150.mic	6.35	0-10	0-10	0-10	

TABLE 1.2:

Sl No	Test Conducted	Sample	Results	Requirements as Per IS: Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	17.66%	----
2	Silt Content	----	0.59%	Not more than 8%
3	Specific Gravity	----	2.61	-----

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NC/QC/YD/2020-21/P2-CA2

Date: 24-09-2020

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub Testing of Construction Materials.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

Table - 1.1: SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002)	
		% Passing	
	20 mm Sample	Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	94.70	85-100	90 - 100
10 mm	45.15	0 - 20	25 - 55
4.75 mm	3.80	0 - 5	0 - 10

TABLE 1.2

SL No	Test conducted	Results	Requirements as per IS 383-1970 & Tests Conforms to IS 2386 (Part I to IV) - 1963 (Reaffirmed on 2002)
1	Flakiness Index	25.46%	Not to exceed 25 %
2	Crushing value	28.72 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces



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ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಧೀನ
ಯು.ಕೆ.ಎ. ಸುಪರಗರ ಸುಪರಗರ
ಬಿ.ಬಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-CA2

Date: 24-09-2020

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) ;

Ref. Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M. S. Venkatesh (MSV Construction Company).

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002)	
		% Passing	
	20 mm Sample	Single size	Graded
40 mm	100.00	100.00	100.00
20 mm	94.70	85-100	90 - 100
10 mm	45.15	0 - 20	25 - 55
4.75 mm	3.80	0 - 5	0 - 10

TABLE 1.2

SL No	Test conducted	Results	Requirements as per IS:383-1970 & Tests Confirms to IS 2386(Part I to IV) - 1963 (Reaffirmed on 2002)
1.	Flakiness Index	25.46%	Not to exceed 25 %
2.	Crushing value	28.72 %	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces



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ಸಹಾಯಕ ಅಭಿಯಂತರ
ಯುಪಕರಣ ಸುಪರ್ದೆ ಮತ್ತು
ಪ್ರತಿಷ್ಠೆ, ಬೆಂಗಳೂರು-100





NC/QC/YD/2020-21/P2-S1

Date: 24-09-2020

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 10 and 12 mm TMT Steel.

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref.: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TABLE - 1

SL No	Details	For 10 mm		For 12 mm	
		Test Results	Min Req. as per IS 1786-2008	Test Results	Min Req. as per IS 1786-2008
01	Observed diameter of bar	10.0 mm	10.0 mm	12.0 mm	12.0 mm
02	Observed Wt/m Length Kg/m	0.621	0.567	0.892	0.834
03	Proof stress/Yield stress, f_y , N/mm ²	554.0	500.0	556.0	500.0
04	Bend/ Re bend Test	Ok	---	Ok	---
05	Percentage of Elongation, %	20.60	12.00	21.50	12.00
06	Ultimate Tensile Strength N/mm ²	642.0	545.0	639.0	545.0

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ಸಹಾಯಕ ಅಭಿಯಂತರರ ಅನುಮೋದನೆ
ಯಂತ್ರಾಂಗ ಅಧಿಕಾರಿರ ಸಹಪರಿಶೀಲನೆ
ಕೆ.ವಿ.ಎಂ.ಕೆ. ಲಿಂಗೇಶ್ವರ-108

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NC/QC/YD/2020-21/P2-CBI

Date: 03-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21, [with main, 2nd, 3rd, 4th, 5th & 6th crm]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	25-09-20	03-10-20	08	22500	365	16.22	16.30
	002	"	"	"	"	360	16.00	
	003	"	"	"	"	375	16.67	

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ಅಧಿಕಾರಿ ಮಾರ್ಗದರ್ಶಿ
03.10.20. ದೃಢೀಕೃತ-106

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NC/QC/YD/2020-21/P2-CB1

Date: 03-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub Testing of Concrete Cubes (for 07days Compressive Strength)

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21. [1st main, 2nd, 3rd, 4th, 5th exam]
Report Required for: Assistant Executive Engineer

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	25-09-20	03-10-20	08	22500	365	16.22	16.30
	002	..	..	..	..	360	16.00	
	003	..	..	..	..	375	16.67	

Page No. 1/1.





NC/QC/YD/2020-21/P2-CB2

Date: 03-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21, [with material, 1st, 2nd, 3rd, 4th, 5th cubes]Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE**CUBE SPECIMENS**

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀**TABLE 1.1:**

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	26-09-20	03-10-20	07	22500	365	16.22	16.15
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	355	15.78	

Page No. 1/1,



03/10/20
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 ಯಲಹಂಕ ನಗರ ಸುಪರ್ಟೆಂಡೆಂಟ್
 ಎಂ.ಎಂ.ಡಿ. ಬೆಂಗಳೂರು-100



NC/QC/YD/2020-21/P2-CB3

Date: 05-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21, [1st main, 3rd, 2nd, 3rd, 4th, 5th from]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	28-09-20	05-10-20	07	22500	375	16.67	16.74
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	370	16.44	

Page No. 1/1,



ಸಹಾಯಕ ಅಭಿಯಂತರರ
ಯೋಜನಾ ಕಾರ್ಯದ ಕಾರ್ಯದರ್ಶಿ,
ಕೆ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-CB3

Date: 05-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21, [11th main, 3rd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	28-09-20	05-10-20	07	22500	375	16.67	16.74
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	370	16.44	

Page No. 1/1.



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಕಾರ್ಯನಿರ್ವಾಹಕ
ಯಂತ್ರಣ ಕಾರ್ಯನಿರ್ವಾಹಕ
ಜಿ.ಪಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-100



NC/QC/YD/2020-21/P2-CB4

Date: 07-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength)

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) }

Ref: Material testing/PMC/20-21, [1st main, 3rd, 3rd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	30-09-20	07-10-20	07	22500	370	16.44	16.67
	002	"	"	"	"	380	16.89	
	003	"	"	"	"	375	16.67	

Page No. 1/1,



ಇತರರ ಸಹಾಯದೊಂದಿಗೆ
ಯಶಸ್ವಿಯಾಗಿ ಸಾರ್ವಜನಿಕ ಕಾರ್ಯಗಳನ್ನು
ಮಾಡುವುದು. ಬೆಂಗಳೂರು-100



NC/QC/YD/2020-21/P2-CB5

Date: 08-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength)

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and

Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref: Material testing/PMC/20-21, [1st main, 1st, 2nd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	01-10-20	08-10-20	07	22500	380	16.89	16.81
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	385	17.11	

Page No. 1/1,




 ಸಹಾಯಕ ಅಧೀಕ್ಷಕರ ಕಛೇರಿ
 ಯಶವಂತರ ಅಪರಂಜಿ ಅಪರಂಜಿ
 ೩೩.೨೦.೨೦, ಬೆಂಗಳೂರು-೫೬

NC/QC/YD/2020-21/P2-CB6

Date: 10-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength).
Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
 Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).
Ref.: Material testing/PMC/20-21, [2nd, 3rd main & Suresh House Road]

Report Required for: Assistant Executive Engineer,
 Yelahanka Satellite Town Sub Division,
 BBMP, Bangalore.
Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
 Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	03-10-20	10-10-20	07	22500	360	16.00	16.07
	002	"	"	"	"	355	15.78	
	003	"	"	"	"	370	16.44	

Page No. 1/1,



ಶಾಖಾ ಸಂಸ್ಥೆಯು ಸಹಿ
 ಯುಕ್ತರ ಸಾಕ್ಷಿರೂಪದಲ್ಲಿ
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NC/QC/YD/2020-21/P2-CB7

Date: 10-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:**Sub:** Testing of Concrete Cubes (for 07days Compressive Strength).**(Project*:** Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)**Ref:** Material testing/PMC/20-21,[2nd, 3rd main, Suresh House Road]**Report Required for:** Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.**Name of the Agency/Contractor*:** M.S. Venkatesh (MSV Constrution Company).**RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE****CUBE SPECIMENS**

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀**TABLE 1.1:**

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	03-10-20	10-10-20	07	22500	385	17.11	16.59
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	365	16.22	

Page No. 1/1,



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಕಛೇರಿ
ಯಲಹಂಕ ನಗರ ಸುಪರ್ಟೌನ್
ಕೆ.ಆರ್.ಎಂ.ಬಿ. ಬೆಂಗಳೂರು-108

NC/QC/YD/2020-21/P2-CB8

Date: 12-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength)
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)
Ref.: Material testing/PMC/20-21, [2nd, 3rd main, Suresh Home Road]
Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore
Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	05-10-20	12-10-20	07	22500	380	16.89	16.89
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	390	17.33	

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NC/QC/VD/2020-21/P2-CB8

Date: 12-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength)

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02).)

Ref. Material testing/PMC/20-21, [2nd, 3rd main, Suresh House Road]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	05-10-20	12-10-20	07	22500	380	16.89	16.89
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	390	17.33	

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NC/QC/YD/2020-21/P2-CB9

Date: 13-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength)

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21, [2nd, 3rd main, Suresh Home Road]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	06-10-20	13-10-20	07	22500	370	16.44	16.22
	002	"	"	"	"	365	16.22	
	003	"	"	"	"	360	16.00	

Page No. 1/1,

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ಅಪರಾಧಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ
ಅಧಿಕಾರವಿಲ್ಲ.



NC/QC/YD/2020-21/P2-CB1A

Date: 23-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref.: Material testing/PMC/20-21. [11th main, 1st, 2nd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	25-09-20	23-10-20	28	22500	500	22.22	22.44
	002	"	"	"	"	510	22.67	
	003	"	"	"	"	505	22.44	

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ಯಾವುದೇ ಮಾರ್ಪಡೆ ಮಾಡಬೇಡಿ.
ಕೆ.ಎಂ.ಎ. ದೃಢೀಕರಣ-106

NC/QC/YD/2020-21/P2-CB2A

Date: 24-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength)

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thrumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21, [11th main, 1st, 2nd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M. S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	26-09-20	24-10-20	28	22500	510	22.67	23.04
	002	"	"	"	"	525	23.33	
	003	"	"	"	"	520	23.11	

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ಯು.ಕೆ.ಎಂ. ಸುಪರ್ಟೆಕ್ಸ್ ಸಂಪನ್ಮೂಲ
ಇ.ಕೆ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-100

NC/QC/YD/2020-21/P2-CB3A

Date: 27-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21, [11th Main, 1st, 2nd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
I	001	28-09-20	27-10-20	29	22500	495	22.00	22.22
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	505	22.44	

Page No. 1/1,



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ಯುನೈಟೆಡ್ ಕಾನ್ಸ್ಟ್ರಕ್ಷನ್ ಕಂಪನಿ,
ಕೆ.ಎಂ.ಎ. ರೋಡ್, ಬೆಂಗಳೂರು-10



NC/QC/YD/2020-21/P2-CB4A

Date: 28-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and

Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21, [11th main, 1st, 2nd, 3rd, 4th, 5th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	30-09-20	28-10-20	28	22500	505	22.44	22.59
	002	"	"	"	"	520	23.11	
	003	"	"	"	"	500	22.22	

Page No. 1/1,



ಶಾಖೆಯು ಸಾರ್ವಜನಿಕ ಅಭಿವೃದ್ಧಿ
ಯೋಜನೆಯ ಅಡಿಯಲ್ಲಿ ಸಿದ್ಧಪಡಿಸಿದೆ.
ಪಿ.ಎಂ.ಐ. ಪಿ.ಎಂ.ಐ. - 106

NC/QC/YD/2020-21/P2-CB5A

Date: 29-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength)
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and

Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21, [2nd, 3rd main, subeh hour 2nd]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg- Value
1	001	01-10-20	29-10-20	28	22500	515	22.89	22.81
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	525	23.33	

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ಯೋಜನೆ ಮತ್ತು ಸಾರ್ವಜನಿಕ ಕಾಮಗಾರಿ
ಇ. ಕೆ. ಎಂ. ಕೆ. ಬೆಂಗಳೂರು-106





NC/QC/YD/2020-21/P2-CB6A

Date: 31-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:**Sub:** Testing of Concrete Cubes (for 28days Compressive Strength).**[Project*:** Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]**Ref:** Material testing/PMC/20-21. *[3rd, 3rd main, Suresh nara road]***Report Required for:** Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.**Name of the Agency/Contractor*:** M. S. Venkatesh (MSV Constnution Company)**RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE****CUBE SPECIMENS**

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀**TABLE 1.1:**

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	03-10-20	31-10-20	28	22500	325	23.33	22.96
	002	"	"	"	"	515	22.89	
	003	"	"	"	"	510	22.67	

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 ಡಿ.ಡಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-100

NC/QC/YD/2020-21/P2-CB7A

Date: 31-10-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28 days Compressive Strength)

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21, [2nd ground floor, 5th floor, 10th floor]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	03-10-20	31-10-20	28	22500	515	22.89	22.52
	002	"	"	"	"	495	22.00	
	003	"	"	"	"	510	22.67	

Page No. 1/1,



ಸಹಾಯಕ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿ
ಯು.ಪಿ.ಎ.ಐ. ಅಧಿಕಾರಿ
ಬಿ.ಬಿ.ಎ.ಐ. ಅಧಿಕಾರಿ-106

NC/QC/YD/2020-21/P2-CB8A

Date: 02-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength)

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21, [3rd, 3rd main, Suresh Home Road]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	05-10-20	02-11-20	28	22500	510	22.67	22.37
	002	"	"	"	"	495	22.00	
	003	"	"	"	"	505	22.44	

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NC/QC/VD/2020-21/P2-CB9A

Date: 03-11-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,

Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₂₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	06-10-20	03-11-20	28	22500	520	23.11	22.74
	002	"	"	"	"	510	22.67	
	003	"	"	"	"	505	22.44	

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ಯುಜಿ.ಎಂ.ಪಿ. ಶಿರೋಗೌಡ-106



NC/QC/YD/2020-21/P2-D1

Date: 01-10-2020

TEST REPORT ON DRY LEAN CONCRETE

(GRADATION TEST)

Sub: To conduct Gradation test on Dry Lean Concrete (DLC) Mix.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02))

Ref.: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
 Yelahanka Satellite Town Sub Division,
 BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
26.50	100	100
19.00	97.25	75-95
9.50	64.10	50-70
4.75	49.35	30-55
2.36	32.90	17-42
0.600	18.55	8-22
0.300	14.35	7-17
0.150	8.75	2-12
0.075	6.40	0-10

Page No. 1/1,

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 ಜಿ.ಪಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-೦೬



NC/QC/YD/2020-21/P2-D2

Date: 03-10-2020

TEST REPORT ON DRY LEAN CONCRETE

(GRADATION TEST)

Sub: To conduct Gradation test on Dry Lean Concrete (DLC) Mix.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

I. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
26.50	100	100
19.00	86.30	75-95
9.50	65.15	50-70
4.75	43.25	30-55
2.36	36.80	17-42
0.600	19.30	8-22
0.300	15.05	7-17
0.150	7.65	2-12
0.075	5.25	0-10

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ಬಿ.ಬಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-100

NC/QC/YD/2020-21/P2-CR1

Date: 14-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref.: Material testing/PMC/20-21,

[Beside nagasri Bike Service]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	07-10-20	14-10-20	07	22500	515	22.89	23.41
	002	"	"	"	"	540	24.00	
	003	"	"	"	"	525	23.33	

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NC/QC/YD/2020-21/P2-CR2

Date: 14-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thurmala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,

Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	07-10-20	14-10-20	07	22500	530	23.56	23.70
	002	"	"	"	"	525	23.33	
	003	"	"	"	"	545	24.22	

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ಇ. ಎಂ. ಡಿ. ಬೆಂಗಳೂರು-108



NC/QC/YD/2020-21/P2-CR3

Date: 15-10-2020

I. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07 days Compressive Strength).

[Project*]: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).

Ref.: Material testing/PMC/20-21.

[Suresh House Road]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE I.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
I	001	08-10-20	15-10-20	07	22500	530	23.56	23.33
	002	"	"	"	"	530	23.56	
	003	"	"	"	"	515	22.89	

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ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಧೀನದಲ್ಲಿ
ಯು.ಪಂ.ಕ. ಅಧೀನದಲ್ಲಿ
ಜಿ.ಡಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-CR1A

Date: 04-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21,

[Beside naghati Bike Service]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	07-10-20	04-11-20	28	22500	730	32.44	32.59
	002	"	"	"	"	745	33.11	
	003	"	"	"	"	725	32.22	

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ಕೆ.ಆರ್.ಎಂ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-CR2A

Date: 04-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	07-10-20	04-11-20	28	22500	745	33.11	33.04
	002	"	"	"	"	735	32.67	
	003	"	"	"	"	750	33.33	

Page No. 1/1,



NC/QC/YD/2020-21/P2-CR3A

Date: 05-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength)

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02.)

Ref.: Material testing/PMC/20-21, [Suresh House Road]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M₃₀

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm ²	Maximum Load in K.N	Compressive Strength (N/ mm ²)	Avg. Value
1	001	08-10-20	05-11-20	28	22500	720	32.00	32.52
	002	"	"	"	"	735	32.67	
	003	"	"	"	"	740	32.89	

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ಇ.ಇ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-W1

Date: 08-10-2020

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21,

[5th A, 5th B, 6th cross]

Report Required for: Assistant Executive Engineer,

Yelahanka Satellite Town Sub Division,

BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TEST RESULTS

I. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	95.35	95-100
26.50	---	-
22.40	72.25	60-80
11.20	54.45	40-60
4.75	36.90	25-40
2.36	24.50	15-30
0.600	18.05	8-22
0.075	3.80	0-5

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ಪಿ.ಪಿ.ಎಂ.ಡಿ. ಕೆ.ಆರ್.ಎಸ್.ಎಸ್-106

Date: 08-10-2020

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M o R T I I Specification, V Revision -2013.
1.	Aggregate Impact Value	27.86%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.58%	Not more than 35.0 %
3.	Water absorption, %	0.41 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2



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ಇ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-108

NC/QC/YD/2020-21/P2-W2

Date: 09-10-2020

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21.

[5th A, 5th B, 6th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

I. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.45	95-100
26.50	---	-
22.40	71.25	60-80
11.20	53.45	40-60
4.75	32.90	25-40
2.36	25.50	15-30
0.600	17.25	8-22
0.075	4.05	0-5

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ಕೆ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106

Date: 09-10-2020

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386 (Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M.O.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.74%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.32%	Not more than 35.0 %
3.	Water absorption, %	0.41 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2



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ಯು.ಪಂ.ಕ. ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿ,
ಜಿ.ಉ.ಪಂ.ಕ. ಬೆಂಗಳೂರು-106

NC/QC/YD/2020-21/P2-W3

Date: 12-10-2020

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21, [5th A, 5th B, 6th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	94.60	95-100
26.50	---	-
22.40	72.30	60-80
11.20	56.45	40-60
4.75	31.90	25-40
2.36	24.50	15-30
0.600	18.25	8-22
0.075	3.65	0-5

Page No. 1/2,



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ಸಹಾಯಕ ಅಧ್ಯಕ್ಷರ ಕಛೇರಿ
ಯಲಹಂಕ ನಗರ ಸುಬ ಡಿವಿಷನ್
ಬಿ.ಬಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-106

Date: 12-10-2020

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.O.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.94%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.65%	Not more than 35.0 %
3.	Water absorption, %	0.41 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2



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ಸಹಾಯಕ ಅಧ್ಯಕ್ಷರಾದ ಅಧ್ಯಯನಗಾರ್
ಯುಜನಿಕರ ಸಹಸರದ ಸಹವಿಭಾಗ
ಡಿ.ಡಿ.ಎಂ.ಡಿ. ಬೆಂಗಳೂರು-106



NC/QC/YD/2020-21/P2-W4

Date: 14-10-2020

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21, [8th, 9th, 2nd cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

I. Gradation Test:

TABLE I.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	93.65	95-100
26.50	---	-
22.40	71.30	60-80
11.20	52.45	40-60
4.75	36.90	25-40
2.36	24.50	15-30
0.600	17.25	8-22
0.075	4.10	0-5

Page No. 1/2,



ಶ್ರೀಮತಿ ಸಾಧು ಸುಬ್ಬರಾಜ್ ಅವರವರಿಗೆ
ಯಲಹಂಕಿ ಸುಪರ್ವೈಸರ್ ಅಧೀನದಲ್ಲಿ,
ಡಿ.ಪಿ.ಎಂ.ಓ. ಬೆಂಗಳೂರು-106

Date: 14-10-2020

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M.O.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.63%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.16%	Not more than 35.0 %
3.	Water absorption, %	0.42 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2



ಶಿಕ್ಷಣಾಧಿಕಾರಿ ಕಛೇರಿ
ಯು.ಕೆ.ಎಸ್. ಸರ್ಕಾರಿ ಕಾಲೇಜು,
ಬಿ.ಬಿ.ಎಂ.ಸಿ. ರೋಡ್-106



NC/QC/YD/2020-21/P2-W5

Date: 15-10-2020

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21,

[1st, 2nd, 8th cross]

Report Required for: Assistant Executive Engineer,

Yelahanka Satellite Town Sub Division,

BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

I. Gradation Test:

TABLE I.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	98.35	95-100
26.50	—	—
22.40	72.15	60-80
11.20	54.35	40-60
4.75	32.85	25-40
2.36	21.65	15-30
0.600	17.10	8-22
0.075	4.05	0-5

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X
ಇತರ ಯೋಜನೆಗಳ ಅಧೀನದಲ್ಲಿ
ಯುನೈಟೆಡ್ ಸರ್ವಿಸ್ ಗೆಸ್ ಸಂಸ್ಥೆಯಿಂದ
ಇ. ಸಿ. ಎಂ. ಡಿ. ರೋಡ್-105



Date: 15-10-2020

TABLE 1.2

SL. No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.74%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.36%	Not more than 35.0 %
3.	Water absorption, %	0.42 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

Page No. 2/2



15/10/20
ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಧೀನದಲ್ಲಿ
ಯಶಸ್ವಿ ಸಂಶೋಧನೆ ಮತ್ತು ಅಭಿವೃದ್ಧಿ
ಪ್ರಾ.ಸಂ.ಸ. ಬೆಂಗಳೂರು-108

NC/QC/YD/2020-21/P2-BD1

Date: 13-10-2020

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.

(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1:

SL No	Details	Test Results	Requirements as per IS 73-1992 Specifications
1.	Penetration at 25 ^o C	52.60 ^o C	Min. 45
2.	Ductility Value at 25 ^o C	107.90 cm	40
3.	Flash point	246 ^o C	Minimum 220 ^o C
4.	Softening point	51.30 ^o C	Min. 47

Page No. 1/1,



ಶ್ರೀಮತ್ ಆಯುಕ್ತರ ಕಛೇರಿ
ಯಲಹಂಕ ಸಬ್ ಡಿವಿಷನ್
ಇ.ಡಿ.ಎಂ.ಕೆ. ಬೆಂಗಳೂರು-106

Date: 13-10-2020

NC/QC/YD/2020-21/P2-CD1

I. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02))

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TABLE I.1:

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.O.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	23.09%	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	26.74%	Not more than 35.0 %
3.	Water absorption, %	0.42%	Not more than 2.0 %
4.	Specific gravity	2.62	-----
5.	Soundness	6.89 %	Max. 12 % in Sodium Sulphate

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ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ
ಯಲಹಂಕ ನಗರ ಸಬ್ ಡಿವಿಷನ್,
ಬಿ.ಬಿ.ಎಂ.ಸಿ, ಬೆಂಗಳೂರು-108





NC/QC/YD/2020-21/P2-CD1

Date: 13-10-2020

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) }

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TABLE 1.1:

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)- 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M.O.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	23.09%	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	26.74%	Not more than 35.0 %
3.	Water absorption, %	0.42%	Not more than 2.0 %
4.	Specific gravity	2.62	-----
5.	Soundness	6.89 %	Max. 12 % in Sodium Sulphate

Page No. 1/1,

ಸಹಾಯಕ ಅಧ್ಯಕ್ಷರ ಅಧೀನದಲ್ಲಿ
ಯೋಜನಾ ಸಹಾಯಕರ ಅಧೀನದಲ್ಲಿ
ಇ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-108



NC/QC/YD/2020-21/P2-DBM1

Date: 19-10-2020

LTEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*} Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref. Material testing/PMC/20-21, [East A, 5th B cross]

Report Required for: Assistant Executive Engineer,
 Yelahanka Satellite Town Sub Division,
 BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

A. Type of Construction - Dense Graded Bituminous Macadam.

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 4.52 %

2. Gradation Test

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	98.25	90-100
19.0	82.15	71-95
13.20	74.40	56-80
4.75	47.55	38-54
2.36	34.05	28-42
0.300	19.80	7-21
0.075	5.35	2-8

Page No. 1/1





NC/QC/YD/2020-21/P2-DS1

Date: 20-10-2020

L TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref.: Material testing/PMC/20-21,

[5th A, 5th B con]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1238	900
2	Marshall Flow at 60°C, mm.	3.26	2.0 - 4.0

Page No. 1/1



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ಇತರರ ಅನುಮೋದನೆ
ಯುಕ್ತರ ಅಧೀನದ ಅಧಿಕಾರಿ,
ಇ.ಸ.ಎ.ಸಿ. ದೊಡ್ಡಬಳ್ಳಿ-106



NC/QC/YD/2020-21/P2-DBM2

Date: 19-10-2020

LTEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21,

[05th A, 05th B Cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TEST RESULTS

A. Type of Construction : Dense Graded Bituminous Macadam.

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 4.53 %

2. Gradation Test

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	93.45	90-100
19.0	80.55	71-95
13.20	72.90	56-80
4.75	46.10	38-54
2.36	32.80	28-42
0.300	18.25	7-21
0.075	6.45	2-8

Page No. 1/1



ಕರ್ನಾಟಕ ರಾಜ್ಯದ ಸಾರ್ವಜನಿಕ ಕಾರ್ಯದರ್ಶಿ
ಯು.ಪಿ.ಎಂ. ಕಚೇರಿಗೆ ಸಲ್ಲಿಸಿರುವ
ಪ್ರತಿ. ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-106

NC/QC/YD/2020-21/P2-DS2

Date: 20-10-2020

LTEST REPORT ON BITUMINOUS MIXES : (STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21, [6th, 8th conv]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.O.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1256	900
2	Marshall Flow at 60°C, mm.	3.44	2.0 - 4.0

Page No. 1/1



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ಯುರಾಕನ ಕಾರ್ಪೊರೇಷನ್
ಇ.ಡಿ.ಎಂ.ಬಿ. ಬೆಂಗಳೂರು-109

NC/QC/YD/2020-21/P2-DBM3

Date: 20-10-2020

1. TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
 Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref. Material testing/PMC/20-21, [6th, 8th cross]

Report Required for: Assistant Executive Engineer,
 Yelahanka Satellite Town Sub Division,
 BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

TEST RESULTS

A. Type of Construction : Dense Graded Bituminous Macadam.

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 4.54 %

2. Gradation Test

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	96.15	90-100
19.0	82.50	71-95
13.20	71.35	56-80
4.75	48.70	38-54
2.36	34.05	28-42
0.300	17.90	7-21
0.075	5.15	2-8



Page No. 1/1
 ಸಹಾಯಕ ಅಯುರೋಗ್ಯ
 ಯುಜನರ ಅಧೀನದ ಅಧಿಕಾರಿ,
 ಜಿ.ಪಿ.ಎಂ.ಸಿ. ಬೆಂಗಳೂರು-10





NC/QC/YD/2020-21/P2-DS3

Date: 21-10-2020

LTEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no. 03 of Yelahanka New Town Sub Division (Package-02)]

Ref: Material testing/PMC/20-21.

Report Required for: Assistant Executive Engineer,
 Yelahanka Satellite Town Sub Division,
 BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

SL No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.O.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1258	900
2	Marshall Flow at 60°C, mm.	3.46	2.0 - 4.0

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NC/QC/YD/2020-21/P2-DBM4

Date: 20-10-2020

LTEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample
(Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thurumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).)

Ref: Material testing/PMC/20-21,

[1st, 2nd loan]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company)

TEST RESULTS

A. Type of Construction : Dense Graded Bituminous Macadam.

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 4.51 %

2. Gradation Test

TABLE L.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specifications- 2013 DBM (Grading - 2)
37.5	100	100
26.5	95.35	90-100
19.0	87.15	71-95
13.20	74.50	56-80
4.75	46.10	38-54
2.36	32.95	28-42
0.300	17.10	7-21
0.075	6.45	2-8

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NC/QC/YD/2020-21/P2-DS4

Date: 21-10-2020

LTEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M S. Venkatesh (MSV Construction Company)

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1246	900
2	Marshall Flow at 60°C, mm.	3.32	2.0 - 4.0

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NC/QC/YD/2020-21/P2-BB1

Date: 16-10-2020

I. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02) }

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE I.1:

SL No	Details	Test Results	Requirements as per IS 73-1992 Specifications
1.	Penetration at 25° C	51.60° C	Min. 45
2.	Ductility Value at 25° C	109.0 cm	40
3.	Flash point	236° C	Minimum 220° C
4.	Softening point	50.40° C	Min. 47

Page No. 1/1,



ಶಾಖೆಯ ಅಧ್ಯಕ್ಷರಾಗಿ ಸಹಯೋಗ
ಯುಕ್ತಕರ ಸಹಸ್ರದ ಸಹವಿಧಾನ.
೧೧.೧೦.೨೦, ಬೆಂಗಳೂರು-೧೦೮



NC/QC/YD/2020-21/P2-BC1

Date: 22-10-2020

1. TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).]

Ref: Material testing/PMC/20-21,

[5th A, 5th B, 6th C]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

A. Type of Construction : Bituminous Concrete

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 5.42 %

2. Gradation Test

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specifications- 2013 BC (Grading - 2)
19.0	100	100
13.2	97.45	90-100
9.5	81.90	70-88
4.75	65.45	53-71
2.36	53.75	42-58
1.18	42.30	34-48
0.600	34.85	26-38
0.300	22.10	18-28
0.150	18.60	12-20
0.075	7.90	4-10

Page No. 1/1

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NC/QC/YD/2020-21/P2-BS1

Date: 23-10-2020

LTEST REPORT ON BITUMINOUS MIXES : (STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref.: Material testing/PMC/20-21, [6th, 8th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Constrution Company).

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1368	900
2	Marshall Flow at 60°C, mm.	3.56	2.0 - 4.0

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NC/QC/YD/2020-21/P2-BC2

Date: 22-10-2020

LTEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref: Material testing/PMC/20-21, (3rd A, 5th B, 6th C, 7th D)

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

A. Type of Construction - Bituminous Concrete

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 5.43%

2. Gradation Test

TABLE L1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specifications- 2013 BC (Grading - 2)
19.0	100	100
13.2	94.25	90-100
9.5	80.10	70-88
4.75	67.35	53-71
2.36	53.80	42-58
1.18	42.35	34-48
0.600	30.75	26-38
0.300	24.65	18-28
0.150	17.10	12-20
0.075	8.35	4-10

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NC/QC/VD/2020-21/P2-BS2

Date: 23-10-2020

1. TEST REPORT ON BITUMINOUS MIXES : (STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21, [6th, 8th cross]

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.O.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1352	900
2	Marshall Flow at 60°C, mm.	3.46	2.0 - 4.0

Page No. 1/1



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ಸುರಕ್ಷತೆ ವಿಭಾಗ, ಬೆಂಗಳೂರು-106

NC/QC/YD/2020-21/P2-BC3

Date: 23-10-2020

L TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.

{Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02).}

Ref: Material testing/PMC/20-21,

[Lth, 8th conv]

Report Required for: Assistant Executive Engineer,

Yelahanka Satellite Town Sub Division,

BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

A. Type of Construction : Bituminous Concrete

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = 5.44%

2. Gradation Test

TABLE L1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specifications- 2013 BC (Grading - 2)
19.0	100	100
13.2	93.25	90-100
9.5	82.15	70-88
4.75	66.35	53-71
2.36	53.80	42-58
1.18	41.35	34-48
0.600	33.75	26-38
0.300	25.65	18-28
0.150	16.10	12-20
0.075	7.35	4-10

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NC/QC/YD/2020-21/P2-BS3

Date: 24-10-2020

1. TEST REPORT ON BITUMINOUS MIXES : (STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.

[Project*: Improvements to roads and construction of RCC drains and culverts at Ananthapura and
Thirumala nagara in ward no: 03 of Yelahanka New Town Sub Division (Package-02)]

Ref: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Satellite Town Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M.S. Venkatesh (MSV Construction Company).

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

SL. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.O.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1354	900
2	Marshall Flow at 60°C, mm.	3.40	2.0 - 4.0

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